PB83-232066

Selected Bibliography on the Periphyton, 1982

(U.S.) Environmental Monitoring and Support Lab.-Cincinnati, OH

1982

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TECHNICAL REPORT DATA *(Please read Instructions on the reverse before completing)*		
1. REPORT NO. EPA-600/D-83-088	2.	3. RECIPIENT'S ACCESSION NO. PB83-232266
4. TITLE AND SUBTITLE A Selected Bibliography on the Periphyton 1982		5. REPORT DATE 1982 6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S) Gary B. Collins		8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS Quality Assurance Branch Environmental Monitoring & Support Laboratory US Environmental Protection Agency Cincinnati, OH 45268		10. PROGRAM ELEMENT NO. 11. CONTRACT/GRANT NO.
12. SPONSORING AGENCY NAME AND ADDRESS See Above		13. TYPE OF REPORT AND PERIOD COVERED Bibliography 1982 14. SPONSORING AGENCY CODE EPA 600/6
15. SUPPLEMENTARY NOTES		

16. ABSTRACT

Environmental measurements are required to determine the quality of ambient water, the character of effluents, and the effects of pollutants on aquatic life. The EMSL-CI conducts an Agency-wide quality assurance program to assure standardization and quality control of systems for monitoring water and wastewater. The effectiveness of measures taken to maintain and restore the biological integrity of the Nation's surface waters is dependent upon our knowledge of the changes in the taxonomic composition of aquatic life caused by discharges of toxic substances and other pollutants, and upon the level of our understanding of the complex relationships that prevail in aquatic ecosystems.

The periphyton is the community of organisms growing on natural or artificial substrates in water. This community is of particular value in accessing changes in water quality in streams since it is stationary and thus is continuously exposed to the water flow. Changes in the periphyton community reflect an integration of the effects caused by the quality of water in the stream. This bibliography primarily covers the 1982 literature and covers ecology, environmental and industrial toxicology, morphology, physiology, systematics and taxonomy of periphyton with emphasis on the algal component of the community. It will be useful to aquatic biologists in selecting articles to evaluate data collected during studies on the effects of toxic substances and other pollutants on the integrity of periphyton communities.

17. KEY WORDS AND DOCUMENT ANALYSIS		
a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
18. DISTRIBUTION STATEMENT DISTRIBUTE TO PUBLIC	19. SECURITY CLASS *(This Report)* UNCLASSIFIED 20. SECURITY CLASS *(This page)* UNCLASSIFIED	21. NO. OF PAGES 8 22. PRICE

EPA Form 2220-1 (Rev. 4-77) PREVIOUS EDITION IS OBSOLETE

PB83-232066

EPA-600/D-83-088

A SELECTED BIBLIOGRAPHY ON THE PERIPHYTON

1982

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FOREWORD

Environmental measurements are required to determine the quality of ambient water, the character of effluents, and the effects of pollutants on aquatic life. The Environmental Monitoring and Support Laboratory - Cincinnati conducts an Agency-wide quality assurance program to assure standardization and quality control of systems for monitoring water and wastewater.The effectiveness of measures taken to maintain and restore the biological integrity of the Nation's surface waters is dependent upon our knowledge of the changes in the taxonomic composition of aquatic life caused by discharges of toxic substances and other pollutants, and upon the level of our understanding of the complex relationships that prevail in aquatic ecosystems.

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